

What is claimed is:

1 1 (currently amended). A method of operating a time division duplex
2 based wireless communications system comprising the steps of
3 establishing, at a base station, a Resource Metric Mapping Function
4 (RMMF); deriving from said RMMF, from both the mean value and
5 standard deviation of the received signal to interference ratio (SIR) for all
6 users, and from estimates of channel load conditions and interference
7 levels, a Resource Metric Region (RMR) showing the number of users
8 experiencing acceptable quality of service , **wherein the step of deriving**
9 **the RMR comprises Kalman prediction of an interference vector**
10 **comprising a predicted interference value for each user**; and deciding,
11 on the basis of the RMR, whether to admit a newly arriving call.

Claim 2 is canceled.

1 3 (currently amended). A method according to claim ~~1~~ 2, wherein the
2 interference vector and the standard deviation thereof are used to predict
3 an available number of users.

1 4 (previously presented). A method according to claim 1, wherein the
2 RMR shows whether the experiencing acceptable quality of service is
3 above or below a maximum upper limit and also whether said number is
4 above or below a maximum lower unit.

1 5 (original) A method according to claim 4, comprising establishing a
2 degree of confidence level for users as a function of the distance of the
3 total number of users from said maximum upper limit and of the distance
4 of the total number of users from said maximum lower limit, and wherein
5 the step of deciding whether to admit a newly arriving call comprises
6 taking into account said degree of confidence level.

1 6 (previously presented). A method according to claim 1, wherein the
2 RMMF is established on the basis of the mean and standard deviation of
3 both the bit error rate (BER) and the SIR.

1 7 (original). A method according to claim 6, wherein SIR values are
2 measured as a sequence of burst values.

1 8 (original). A method according to claim 7, wherein a BER value is
2 determined for each SIR burst value as a function thereof.

1 9 (previously presented). A method according to claim 7, wherein link
2 quality is estimated by mapping pairs of parameters, each pair comprising
3 the mean and standard deviation of BER or SIR, onto the average BER.

1 10 (currently amended). A base station for use in a time division duplex
2 based wireless communications system, the base station comprising
3 means for establishing a Resource Metric Mapping Function (RMMF);
4 means for deriving from said RMMF, from both the mean value and
5 standard deviation of the received signal to interference ratio (SIR) for all
6 users, and from estimates of channel load conditions and interference
7 levels, **wherein the means for deriving the RMR comprises means for**
8 **Kalman prediction of an interference vector comprising a predicted**
9 **interference value for each user;** a Resource Metric Region (RMR)
10 showing the number of users experiencing acceptable quality of service;
11 and means for deciding, on the basis of the RMR, whether to admit a
12 newly arriving call.

Claim 11 is canceled.

1 12 (currently amended). A base station according to claim **10** ~~11~~,
2 wherein the RMR shows whether the experiencing acceptable quality of

3 service is above or below a maximum upper limit and also whether said
4 number is above or below a maximum lower limit and the base station
5 comprises means for establishing a degree of confidence level for users
6 as a function of the distance of the total number of users from said
7 maximum upper limit and of the distance of the total number of users from
8 said maximum lower limit, and wherein the means for deciding whether to
9 admit a newly arriving call comprises means taking into account said
10 degree of confidence level.

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